K.05
2/2/87
153572

Sverdrup

DAILY FIELD REPORT

DATE: February 2, 1987

TIME: 0930 to 1730

PLACE: Cerro Copper Plant Site
Sauget, IL

WEATHER: Partly Cloudy, 30s

PROJECT: JOB 10224A
CERRO COPPER
IEPA RI/FS OVERSIGHT

DISTRIBUTION:

S. Silverstein, Cerro (2 copies)
LJO/JBC/ED 10224A-1.3

PERSONNEL ON SITE:

Name	Affiliation	Hrs.
Dave Guyan	Sverdrup	8.0
Dan Sewall	Ecology & Environment (E&E)	8.0
Tim Maley	Ecology & Environment (E&E)	8.0
Jerry Hamman	Fox Drilling	8.0
Robbie Crachity	Fox Drilling	8.0
Henry Colligan	**Drillers Union Official**	**8.0**

FIELD WORK SUMMARY:

1. Dave Guyan arrived at Metro Field Office at 0930. Above listed personnel entered Cerro Copper Facility at 0945.

2. Crew set up at the first location, soil boring I-6. This is located approximately 600' north of I-5 (see Attachment A). Initial sample was collected at 1100. Crew members wore Level C protective clothing.

3. Boring completed at 1215 to a depth of 32.0'. Drillers used a tremie line to grout hole after removing five feet of auger. Crew met at decon area after augers were removed. T. Maley told D. Guyan that soil was very oily and HNU photoionization detector had detected significant levels. Augers also had a oily residue on them when pulled from hole. All members departed site for lunch at 1325.

4. Drillers began steam cleaning at 1415. R. Crachity complained of strong odors while steam cleaning. He stopped steam cleaning and J. Hamman went to the Metro Field Office to obtain a full-face respirator. Hamman returned to site with E&E crew at 1500. Crachity wore a full-face respirator and resumed cleaning.

5. Steam cleaning completed at 1600; however, oily residue still remained on augers. D. Sewall departed site to obtain hexane from

C284-12

field office. Drillers then used a tub filled with hexane to scrub oil from augers, drill rods, tools, etc.

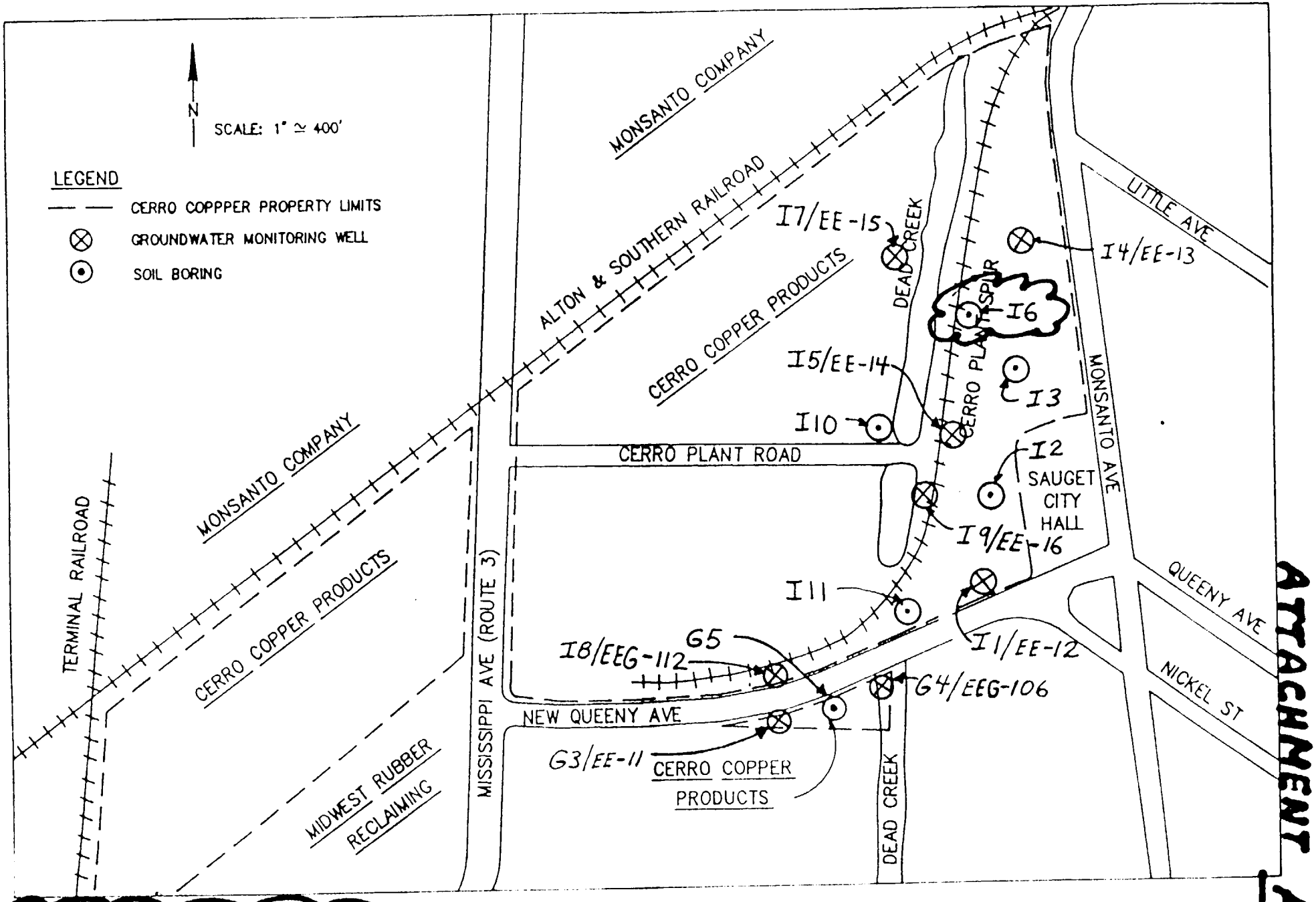
6. R. Crachity and H. Colligan went back to boring I-6 to shovel drill cuttings into a 55-gallon drum. They then took the drum for storage at Metro Field Office.

7. J. Hamman finished scrubbing equipment with hexane at 1700. R. Crachity steam cleaned equipment as a final rinse. All personnel departed site by 1730. Personnel will meet at guard house tomorrow at 0700.

8. D. Guyan took 14 pictures of the day's activities.

Attachments (1)

David W. Guyan
Sverdrup Corporation



NOTE: NUMBERING LEGEND = BORING HOLE ID/WELL ID

SITE MAP AND E & E WORK AREAS

ATTACHMENT A

A 2
10/15/90
1533(

Patterson Schafer, Incorporated

Environmental Consultants

October 15, 1990

Chief
Compliance Section (5WQC-TUB-8)
United States Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Chief
Compliance Assurance Section
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

RE: Cerro Copper Products Company
Pretreatment Regulations
Order Pursuant to 33 U.S.C. Section 1319(a)
Docket No. V-W-87-AO-42
Docket No. V-W-88-AO-01

Dear Sirs:

This is the final letter report to be submitted pursuant to the terms of the above referenced administrative orders issued to Cerro Copper Products Company ("Cerro"). The administrative orders are superceded effective September 1, 1990, pursuant to the terms of paragraph 18 of the Consent Decree between the United States and Cerro in the action entitled "United States v Cerro Copper Products Company". Therefore, this quarterly Periodic Compliance Report of monthly monitoring activities is for July and August, 1990. The report is accompanied by supporting documentation of the field and analytical results for the monitoring conducted each month by Patterson Schafer, Inc., Chicago, Illinois, at Cerro's plant in Sauget, Illinois. The two documents are titled "Field Sampling Report - Periodic Compliance Report Monitoring", for July and August, 1990 (respectively).

The results of the field monitoring and analytical programs have been reduced to mass discharge figures for regulated pollutants for each major subcategorical area of the plant, for each month, as shown in the attached Exhibits A, and B for July and August, respectively. The discharge allowances shown are based on plant historical production data evaluated and reflected as mass limitations in Mr. Sutfin's letters dated November 10, 1988, December 21, 1988, and January 25, 1989, to Mr. Tandler of Cerro.

All of the plant effluent data shown in the Exhibits are in "pounds per day" except for pretreated effluent from Metal Molding and Casting, which is "pounds per batch". The mass discharge values for volatile organic compounds, total phenols and oil and grease were calculated using flow weighted data, as instructed.

C05906

39 SOUTH LA SALLE STREET • SUITE 917 • CHICAGO, ILLINOIS 60603 • PHONE (312) 372-1100 • FAX (312) 372-7188

In accordance with Mr. Sutfin's letter dated November 10, 1988, Copper Forming (Extrusion) is calculated as the East Outfall (12C) less Secondary Copper (8A), except that when 8A exceeds 12C, the 12C value is attributed entirely to 8A, and Copper Forming (Extrusion) is reported as zero.

Flow measurements, sampling procedures, and analytical results are described in the accompanying "Field Sampling Reports" mentioned above. This report reflects grab based composite data, as directed in Mr. Schregardus' letter of March 23, 1989. Analytical procedures reflected are those contained in 40 CFR 136.

As agreed, lift station 9A is reported separately in Table 1 as a non-regulated stream. Flows remained in the range of 3 to 20 gpm, during the quarter. TTO values were reported present at very low levels in July and August.

Metal Molding and Casting discharge remains well within compliance limits. TTO values stayed in compliance for Metal Molding and Casting during the entire period shown.

In order to display trends in the TTO values, we continue reporting them from July, 1988 to date (Table 2).

As required in Mr. Sutfin's letter of December 21, 1988, duration and flow of the batch discharges from the pretreatment facility of Metal Molding and Casting are shown in Table 3. There was no discharge from the pretreatment facility of Metal Molding and Casting during the month of July because the No. 6 casting furnace and the associated air pollution scrubber were not in operation. Concentration values are given in the Field Sampling reports by Patterson Schafer, Inc.

Please call if you have any questions.

Cordially,

Carl J. Schafer

cc: Mr. Tandler/Mr. Grana (w/encl)
Mr. Conreaux
Mr. Schillinger (w/encl)
Mr. Kissel/Ms. Franzetti (w/encl)

CJS/MC/gv

880060.1

EXHIBIT A

PCR DATA - CERRO/SAUGET

July 25 - 26, 1990

	Metal Molding & Casting		Secondary Copper (8A)		Copper Forming Piercing (3B)		Extrusion	
	Actual	Limit	Actual	Limit	Actual	Limit	Actual	Limit
Cu	0.0	0.825	0.828	0	0.454	0.178	0.341	0.734
Pb	0.0	0.512	0.232	0	0.017	0.023	0.216	0.093
Zn	0.0	0.570	0.320	0	0.018	0.108	0	0.447
Phen	0.0	0.028	0.004	0	NR		NR	
TTO	0.0	0.074	0.013	0	0.046	0.060	0.086	0.249
O&G*	0.0	0.978	8.416	0	2.385	2.134	418.983	8.814
Cr	NR		0.014	0	0.016	0.032	0.016	0.131
Ni	NR		0.131	0	0.013	0.226	0.329	0.932
Prod (lb)	668,945		477,992		0		828,000	

Notes:

Limitations are monthly average limits (lb/d), in lieu of daily maximum limits, based on historical production figures per Mr. Sutfin's letter of November 10, 1988 and January 25, 1989, (as amended by his letter of December 1, 1988, for Metal Molding and Casting). Cerro does not, by this reporting, waive and does hereby respectfully reserve it's right to assert that the daily maximum limit is applicable where sampling is conducted once per month.

NR = Not regulated for this category.

Phen = Total phenols (4 AAP).

* = Alternative limitation.

EXHIBIT B

PCR DATA - CERRO/SAUGET

August 27 - 28, 1990

	Metal Molding & Casting		Secondary Copper (8A)		Copper Forming Piercing (3B)		Extrusion	
	Actual	Limit	Actual	Limit	Actual	Limit	Actual	Limit
Cu	0.023	0.825	1.029	0	0.090	0.178	1.448	0.734
Pb	0.010	0.512	0.456	0	0.005	0.023	0	0.093
Zn	0.023	0.570	2.558	0	0.007	0.108	0	0.447
Phen	0.0	0.028	0.007	0	NR		NR	
TTO	0.0	0.074	0.010	0	0.049	0.060	0.090	0.249
O&G*	0.280	0.978	4.510	0	1.083	2.134	501.180	8.814
Cr	NR		0.064	0	0.007	0.032	0.002	0.131
Ni	NR		3.789	0	0.0	0.226	0	0.932
Prod (lb)	873,266		203,962		0		833,000	

Notes:

Limitations are monthly average limits (lb/d), in lieu of daily maximum limits, based on historical production figures per Mr. Sutfin's letter of November 10, 1988 and January 25, 1989, (as amended by his letter of December 1, 1988, for Metal Molding and Casting). Cerro does not, by this reporting, waive and does hereby respectfully reserve it's right to assert that the daily maximum limit is applicable where sampling is conducted once per month.

NR = Not regulated for this category.

Phen = Total phenols (4 AAP).

* = Alternative limitation.

TABLE 1

Discharge (lb/day) at Lift Station 9A

Date	Flow (gpm)	Cu	Pb	Zn	Phen	TTO	O&G
11/88	3.2	0.85	0.10	0.18	0	0	4.23
12/88	12.1	0.15	0	0.01	0	0	6.23
01/89	3.0	0.176	0	0.06	0	0	0.106
02/89	8.8	0.517	0	0.129	0	0	0.929
03/89	11.5	0.06	0	0.146	0	0	1.54
04/89	3.7	0.1011	0.001	0.023	0	0	0.296
05/89	10.5	0.4935	0.011	0.436	0	0	1.079
06/89	11.7	0.132	0.004	0.018	0	0.002	1.11
07/89	12.6	0.705	0.026	0.067	0	0	1.20
08/89	9.7	0.500	0.009	0.331	0	0	2.49
09/89	12.6	0.637	0.044	0.630	0	0	7.33
10/89	9.0	0.163	0.008	0.149	0	0	0.597
11/89	11.5	0.207	0.015	0.238	0	0.030	12.613
12/89	-	-	-	-	-	-	-
01/90	55.7	0.435	0.053	0.100	0.003	0.018	11.751
02/90	6.2	1.156	0.056	0.187	0	0	3.453
03/90	6.2	0.434	0.009	0.127	0	0	0.53
04/90	4.3	0.382	0.009	0.124	0	0	2.863
05/90	13.4	0.160	0.009	0.016	0	0.005	1.430
06/90	18.9	0.815	0.011	0.024	0.002	0.039	1.972
07/90	4.8	0.048	0.001	0.007	0	0.002	0.906
08/90	7.9	0.128	0.006	0.081	0	0.002	0.522

TABLE 2
PCR DATA-CERRO/SAUGET
Total Toxic Organics

	Metal Molding & Casting		Secondary Copper (8A)		Copper Forming Piercing (3B)		Extrusion	
	Actual	Limit	Actual	Limit	Actual	Limit	Actual	Limit
1988								
Jul	0.003	0.074	0.730	0	29.720	0.060	0	0.249
Aug	0.024	0.074	0.090	0	1.183	0.060	0	0.249
Sep	0	0.074	0.250	0	0.008	0.060	0	0.249
Oct	0	0.074	0	0	0.34	0.060	0	0.249
Nov	0	0.074	0	0	0.20	0.060	0.060	0.249
Dec	0	0.074	0.100	0	0.073	0.060	0.106	0.249
1989								
Jan	0	0.074	0.100	0	0.038	0.060	0.020	0.249
Feb	0	0.074	0.010	0	0.114	0.060	0.070	0.249
Mar	0.001	0.074	0	0	0.541	0.060	0.288	0.249
Apr	0	0.074	0	0	0.075	0.060	0.034	0.249
May	0.001	0.074	0	0	0.071	0.060	0.182	0.249
Jun	0.002	0.074	0	0	0.070	0.060	0.026	0.249
Jul	0	0.074	0	0	0.073	0.060	0.076	0.249
Aug	0	0.074	0	0	0.026	0.060	2.387	0.249
Sep	0	0.074	0.005	0	0.047	0.060	0.395	0.249
Oct	0	0.074	0	0	0.004	0.060	0.390	0.249
Nov	0	0.074	0.003	0	0.036	0.060	0.021	0.249
Dec	0	0.074	0	0	0.065	0.060	0.543	0.249
1990								
Jan	0.003	0.074	0.006	0	0.079	0.060	0.070	0.249
Feb	0.002	0.074	0.007	0	0.047	0.060	0.460	0.249
Mar	0.002	0.074	0	0	0.036	0.060	0.056	0.249
Apr	0.010	0.074	0.009	0	0.035	0.060	1.025	0.249
May	0.001	0.074	0.011	0	0.023	0.060	0.032	0.249
Jun	0.008	0.074	0.032	0	0.033	0.060	0.029	0.249
Jul	0	0.074	0.013	0	0.046	0.060	0.086	0.249
Aug	0	0.074	0.010	0	0.049	0.060	0.090	0.249

TABLE 3

Metal Molding and Casting

Discharge Information

Date	Began Discharge	Sample Taken
Nov. 23, 1988	9:00 am*	10:20 am
Dec. 12, 1988	9:30 am*	11:00 am
Jan. 19, 1989	8:30 am	9:20 am
Feb. 24, 1989	3:00 pm	4:35 pm
Mar. 13, 1989	3:00 pm	4:00 pm
Apr. 19, 1989	3:00 pm	4:35 pm
May 22, 1989	3:00 pm	3:30 pm
Jun. 6, 1989	12:00 pm	1:00 pm
Jul. 28, 1989	10:00 am	2:10 pm
Aug. 2, 1989	11:15 am	2:35 pm
Sep. 7, 1989	8:00 am	
	10:45 am	12:50 pm
Oct. 5, 1989	8:00 am	8:30 am
	3:00 pm	3:15 pm
Nov. 22, 1989	9:30 am	10:15 am
	12:30 pm	1:25 pm
Dec. 15, 1989	9:00 am*	11:05 am
	2:00 pm*	2:25 pm
Jan. 24, 1990	8:00 am	10:20 am
	11:00 am	12:24 pm
Feb. 28, 1990	8:26 am	9:07 am
	10:30 am	11:10 am
Mar. 14, 1990	12:00 pm	12:45 pm
	2:00 pm*	12:50 pm
Apr. 18, 1990	8:45 am	9:00 am
	11:30 am	11:30 am
May 18, 1990	8:30 am	10:28 am
	10:45 am	10:45 am
Jun. 13, 1990	8:00 am	9:00 am
	12:00 pm*	9:15 am
Aug. 27, 1990	8:30 am	9:30 am
	3:00 pm	3:30 pm

*Estimated

The volume discharge is about 6,000 gallons through March, 1989, about 7,000 gallons from March through July, 1989, and about 14,000 gallons thereafter. Discharged over a period of 5 to 6 hours, limited by flow hydraulics, the equivalent rate is 35-40 gpm. Chloride control requirements to minimize corrosion in the AP scrubber necessitated increased effluent off-take to the pretreatment system beginning in August, 1989. The effluent represents two days production and is pretreated every other day.

153671

2-Nitroaniline
o-Nitroaniline

CAS = 88-74-4
Formula = $O_2NC_6H_4NH_2$
FW = 138.13 $C_6H_6N_2O_2$
mp = 71-73°C
bp = 284 °C
Fp = 150 °C

Not on 302, CERCLA, 313, RCRA, [redacted]
Lists

DOT = UN 1661 Poison